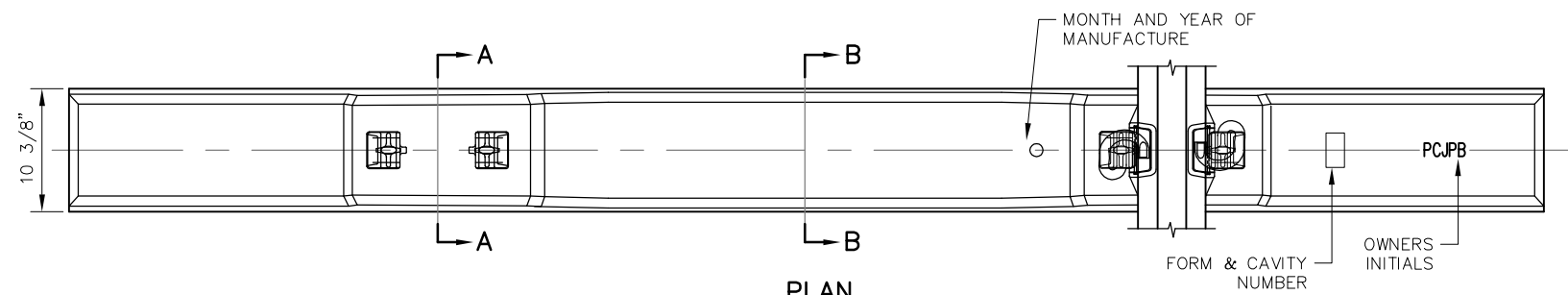


ELEVATION



PLAN
CONCRETE GRADE CROSSING TIE

GENERAL NOTES:

GENERAL

1. CONFORM WITH AREMA CURRENT CHAPTER 30, CONCRETE TIES AND CALTRAIN STANDARD SPECIFICATION SECTIONS 20044 AND 20046
2. SUBMIT SHOP DRAWINGS FOR APPROVAL
3. THE TIE SHALL BE OF UNIFORM IN WIDTH
4. SPECIFIED PANDROL FASTENINGS MAY CHANGE DUE TO CHANGES BY THE MANUFACTURER
5. WEIGHT: 750 LBS MAX (± 20 LBS) INCLUDING FASTENING SHOULDERS

CONCRETE

1. 7,000 PSI MINIMUM AT 28 DAY
2. 4,500 PSI MINIMUM AT TRANSFER
3. AIR ENTRAINED: MINIMUM 3.5% AIR IN HARDENED CONCRETE

PRESTRESSING

1. 5.32 MM NOMINAL DIAMETER (ASTM A881M), GRADE 260, STRESS RELIEVED. TENSION EACH WIRE TO 7000 PSI
2. WIRE PATTERN: 20 MINIMUM, 4 ROWS
3. CUT WIRE TO WITHIN 1/8" FROM SURROUNDING CONCRETE AT THE ENDS

SURFACE FINISH

STEEL FORM FINISH, EXCEPT BOTTOM AND ENDS SHALL HAVE ENOUGH FINISH

RAIL FASTENINGS (PANDROL)

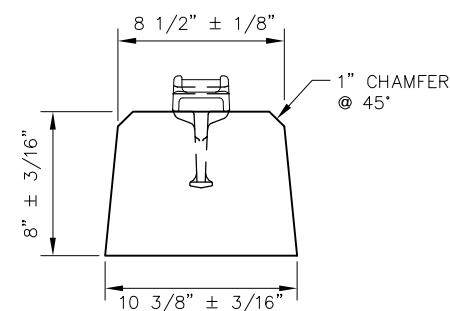
1. TIE PAD: 6.5 MM THICK 7083WB (POLY)
2. SHOULDERS: 9086
3. TOE INSULATOR: 7695
4. POST INSULATOR: 7692
5. CLIPS: E 2055, GALVANIZED

NOTES:

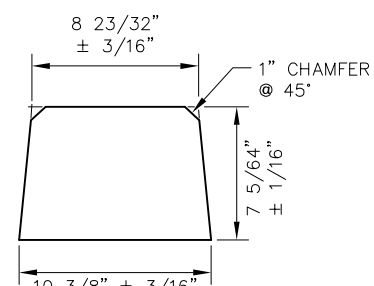
- a) NORMAL TOE LOAD 2,400 TO 3,000 LBS, AND NORMAL RAIL SEAT CLAMPING FORCE 4,800 TO 6,000 LBS
- b) SEE SD-2222 FOR FASTENING ASSEMBLIES FOR STANDARD JOINTS AND INSULATED JOINTS
- c) IN THE EVENT OF SUBSEQUENT PRODUCTION CHANGE, SUBMIT (IN WRITING) FOR ENGINEER'S APPROVAL PANDROL RECOMMENDED REPLACEMENT WHICH EQUALS OR EXCEEDS THE PART NUMBER SPECIFIED HEREIN

TOLERANCES

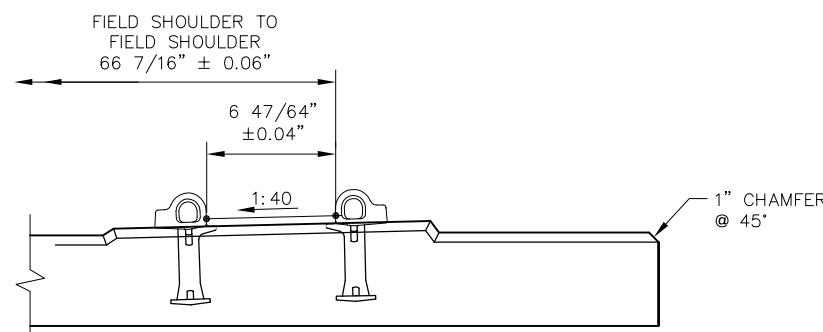
1. RAIL SEAT CANT: 1:40 ± 5
2. RAIL SEAT FLATNESS: ± 1/32" ACROSS ANY PART OF THE RAIL SEAT



SECTION A-A



SECTION B-B



DETAIL 1
SHOULDERS

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD		STANDARD DRAWINGS	CADD FILE NO.: SD-2212
APPROVED BY: <i>Bernard Anzures</i> <i>Steph Chen</i>		TRACK RAILS, TIES, AND FASTENERS CONCRETE TIES FOR 136 RE RAIL GRADE CROSSINGS TIES	REV: 0 DATE: 093011
ENGINEERING MANAGER	DEPUTY DIRECTOR OF ENGINEERING		STANDARD NO.: SD-2212

